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## Axial setting device with disc spring transmission

## Abstract

A coupling assembly 11 having an axial setting device 21 in the form of a ball ramp assembly with an axially supported supporting disc 23 and an axially displaceable pressure disc 24 which are provided with ball grooves 25, 26 whose depth is circumferentially variable in opposite directions. Balls 27 run in pairs of ball grooves. The supporting disc 23 and the pressure disc 24 are rotatable relative to one another by being driven by a motor, wherein the pressure disc 24 acts on the first pressure plate 42. The coupling assembly 11 loaded by a second pressure plate 36, wherein a disc spring 43 is arranged between the first pressure plate 42 and the second pressure plate 46. The apex of the disc angle of the disc spring 43 points towards the first pressure plate 42. The disc spring 43 which, at its outer circumference, is axially secured in the coupling carrier 12, acts on the second pressure plate 46 by means of an intermediate diameter and, at its inner edge, rests against the first pressure plate.

Figure